WHAT IS CLAIMED IS:

1. An isolated nucleic acid molecule encoding a variant CD11b α subunit having the Ile at position 332 replaced with an amino acid selected from Gly and Ala.

2. A isolated nucleic acid molecule encoding a polypeptide consisting of amino acids 144 to 331 of CD11b α subunit.

3. An isolated nucleic acid molecule encoding a polypeptide comprising amino acids 144 to 332 of CD11b α subunit wherein the Ile at amino acid 332 has been replaced by an amino acid selected from Gly and Ala.

4. A polypeptide comprising amino acids 144 to 332 of CD11b α subunit wherein the Ile at position 332 has been replaced by an amino acid selected from Gly and Ala.

5. A polypeptide comprising amino acids 144 to 331 of CD11b α subunit, the polypeptide not comprising amino acids 332 to 1152 of CD11b.

6. An isolated nucleic acid molecule encoding a variant CD11a α subunit having the Ile at position 331 replaced with an amino acid selected from Gly and Ala.

7. An isolated nucleic acid molecule encoding a polypeptide consisting of amino acids 144 to 330 of CD11a α subunit.

8. An isolated nucleic acid molecule encoding a polypeptide comprising amino acids 150 to 331 of CD11a α subunit wherein the Ile at amino acid 331 has been replaced by an amino acid selected from Gly and Ala.

9. A polypeptide comprising amino acids 150 to 331 of CD11a α subunit wherein the Ile at position 331 has been replaced by an amino acid selected from Gly and Ala.

10. A polypeptide comprising amino acids 150 to 330 of CD11a α subunit, the polypeptide not comprising amino acids 331 to 1223 of CD11a.

11. A method for determining whether a test compound is a candidate compound for binding to CD11b, comprising:

(a) contacting a test compound with a polypeptide comprising amino acids 144 to 332 of CD11b α subunit wherein the Ile at amino acid 332 has been replaced by an amino acid selected from Gly and Ala, and

(b) determining whether the test compound binds to the polypeptide,

wherein a compound which binds to the polypeptide is a candidate compound for binding to CD11b.

12. A method for determining whether a test compound is a candidate compound for binding to CD11a, comprising:

(a) contacting a test compound with a polypeptide comprising amino acids 150 to 331 of CD11a α subunit wherein the Ile at amino acid 332 has been replaced by an amino acid selected from Gly and Ala, and

(b) determining whether the test compound binds to the polypeptide,

wherein a compound which binds to the polypeptide is a candidate compound for binding to CD11a.